

Ship 09/06!

Work Order ID 120051

120051

June-04-14 7:29:56 AM

Item ID: 647.4114

Revision ID:

Item Name: Shim

Start Date: 6/04/14

Start Qty: 6.00

6

Required Date: 6/04/14

Req'd Qty: 6.00

6

Reference:

Accept

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Approvals:

Process Plan: MLS

Date: 14-06-04

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

NR1

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

647.4100

n/c

110

0.00

110

Waterjet

FLOW CNC Waterjet

Memo

1-Cut as per Dwg

Dwg Rev: NC

Prog Rev: NC

2-Deburr if necessary

0.00

DAS
20
9-89

mm (6)

14/06/05

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Quality Control

Memo

0.00

DAS
20
9-89

mm (6)

14/06/05

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____ _____
--	--	---	---

Work Order ID 120051

June-04-14 7:29:56 AM

120051

Page 2

Item ID: 647.4114 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Shim
Start Date: 6/04/14 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 6/04/14 Req'd Qty: 6.00 ***6*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				6			
140 *140* Outsource4 Outsource process - Anodize	Outsource process-Anodize per QSI017 4.1.10.1 Memo Issue P/O to ATG : <u>24495</u> 1- Black Anodize as per Dwg 647.4100 2- PRIME AS PER DWG, SEE NOTE #2 Certification of Comformity is required	0.00 0.00							Q 14/06/06 (6)
150 *150* Packaging Packaging	Receive & Inspect for Damage & Mat'l Certs Memo	0.00 0.00							6x SP14-6-10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---	--

Work Order ID 120051

June-04-14 7:29:56 AM

120051

Page 3

Item ID: 647.4114

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Shim

Start Date: 6/04/14 Start Qty: 6.00

6

Cust Item ID:

Required Date: 6/04/14 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC5- Inspect part completeness to step on W/O	0.00				6			
160		27							
QC	Memo	0.00							
Quality Control									
190	Identify as per dwg & Stock Location: <u>ST</u>	0.00							
190									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***								
200	QC21- Final Inspection - Work Order Release	0.00							
200									
QC	Memo	0.00							
Quality Control									

W1406.11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---	--

Picklist Print

June-04-14 7:29:59 AM

Page 1

Work Order ID: 120051

120051

Parent Item: 647.4114

647 4114

Parent Item Name: Shim

Start Date: 6/04/14

Required Date: 6/04/14

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:A 12.10.26 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.063		Purchased		No		110	sf	189.4339	0.0328	1			

M2024T3S 063

2024-T3 .063 sheet

mm 14/06/05

Location

Loc Qty

Loc Code

MAT022

189.4339

123701

16.1039

m127866

63.93

m128354

109.4

0.3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---	--

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
--	--	---	--

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NL 04510

SHEET 1 OF 1

DWG NO. 647.4100

REV: N/C

PREPARED
BY:

J. BECKER

DATE: 04/24/14

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: SHEETMETAL

APPROVED BY:

ENGR

MFG

QC

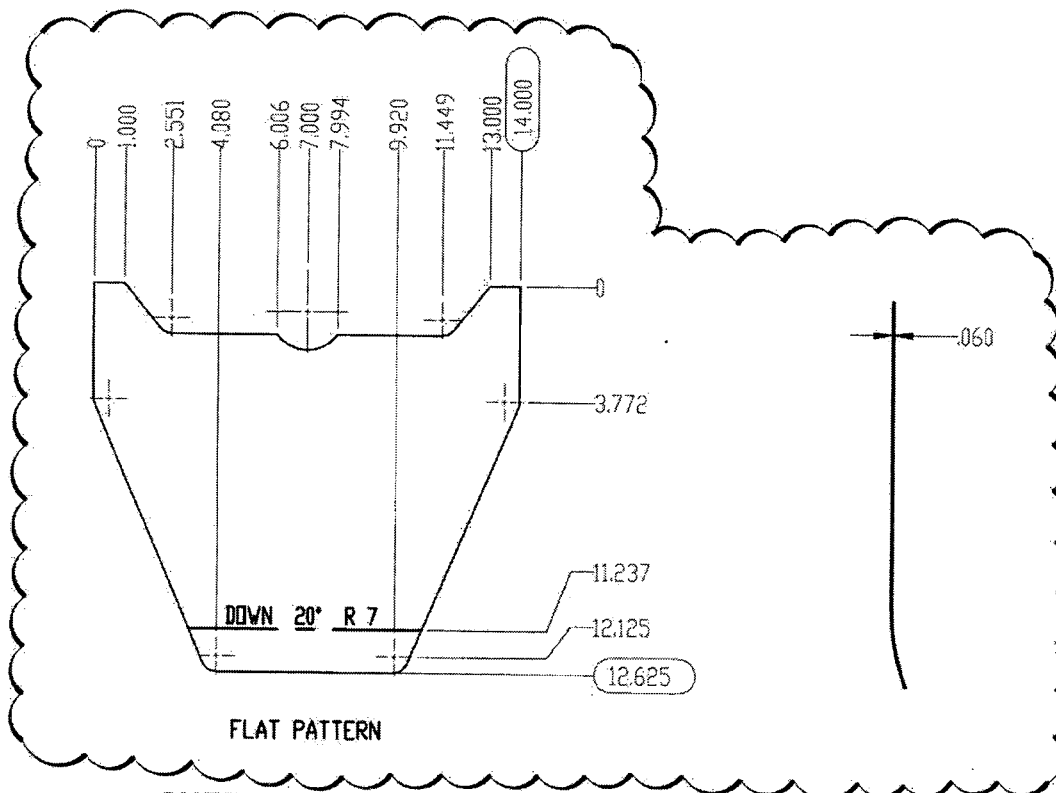
EFF:

NEXT ORDER

TRANSACTION CODES (TC):

A-ADD C-CREATE
R-REVISE D-DELETE

REASON: MODIFIED DOUBLER.



SHEET 1, ZONE C2 IS:

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 120051 MJS

140604

DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☐ BOM

CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☐ YES ☒ NO

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 02866				SHEET 1 OF 1	
	DWG NO. 647.4100	REV: N/C	PREPARED BY R. ROSANO	DATE: 05/05/10	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.	
	DWG TITLE: SHEET METAL					
	APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: CURRENT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: CHANGED PRETREATMENT CALLOUT				

SHEET 1, ZONE A1 IS:

NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4

2. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE II,
CLASS 2, COLOR BLACK
PRETREAT PR-148 ADHESION PROMOTER
PRIME IAW MIL-P-23377J TYPE I CLASS N

IS

3. DEBURR AND BREAK ALL SHARP EDGES

4. IDENTIFY IAW MPP-120

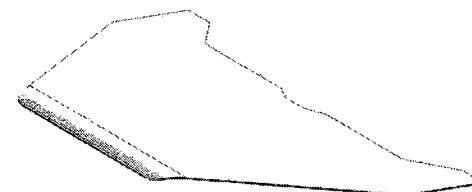
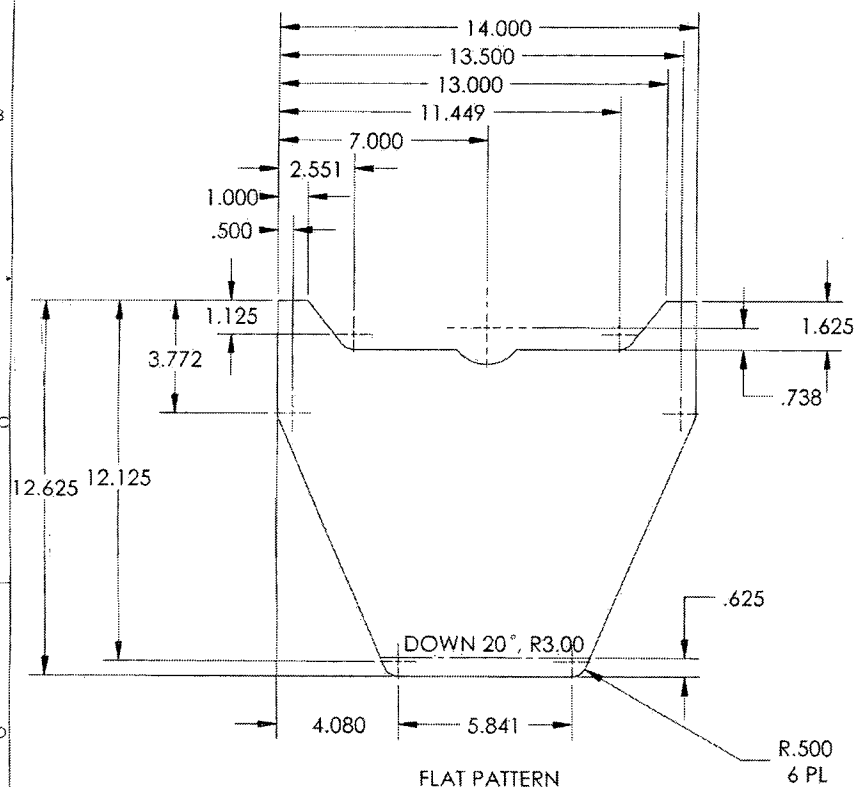
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				<input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4
2. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE II, CLASS 2, COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PICTURE RELEASE PER		TJC
2	REWORK RELEASE	08/20/07	P. BRAYO



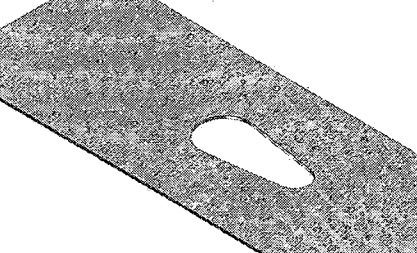
647.4110

.060

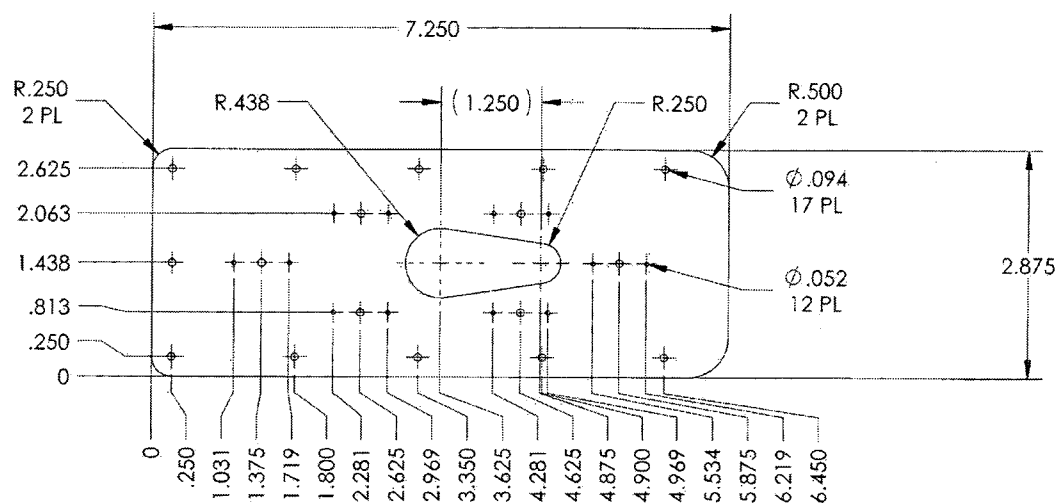
UNINCORPORATED ECN(s)

02866, 04510

			647.4116	SHIM	△	△
			647.4115	SHIM	△	△
			647.4114	SHIM	△	△
			647.4113	CLIP	△	△
			647.4112	CLIP	△	△
			647.4111	DOUBLER	△	△
			647.4110	DOUBLER	△	△
QTY	FIND #	PART #	DESCRIPTION	MATL	SPEC.	
NEXT ASSY (S)			PARTS LIST			
647.3700		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES SPECIFIED				
		ELECTROLYTIC ANODIZING				
		TOLERANCES ARE:				
		2 PLACE DECIMALS ± .01				
		ANGLES: ± .5°				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92556-3512 (760) 724-5300				
		SHEETMETAL				
		APICAL INDUSTRIES				
		2608 TEMPLE HEIGHTS DR.				
		OCEANSIDE, CA. 92				

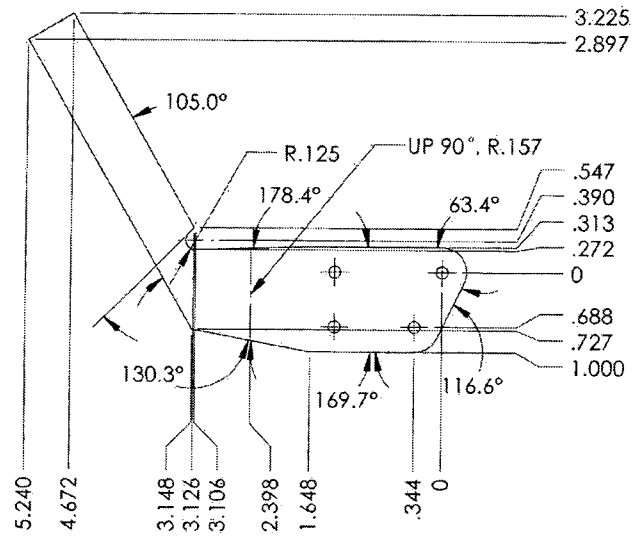
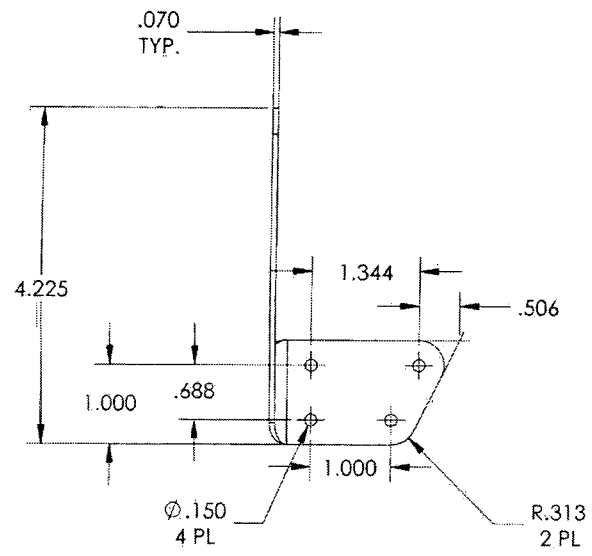
A rectangular metal plate with a central oval hole. The plate has a textured, possibly galvanized, surface. The number 647.4111 is printed at the bottom center.

647.4111

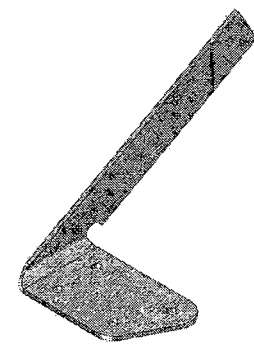
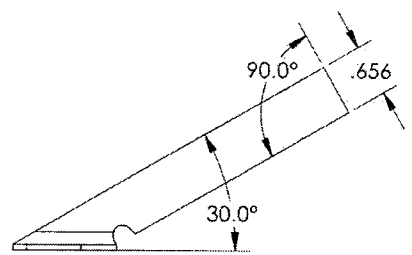
[illegible]

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REV.	DESCRIPTION	DATE	APPROVED



FLAT PATTERN



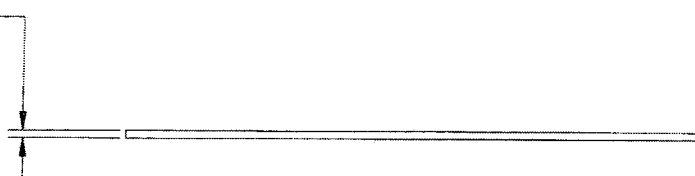
647.4113 SHOWN
647.4112 OPPOSITE

ORIGINAL DATE 10/20/99 DRAWN BY K. FOSHOLD CHECKED BY J. BRADY DESIGNED BY J. BRADY CONTRACT NO.	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300 SHEETMETAL
LISTED DIMENSIONS SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE .001 FRACTIONS ARE 1/16 STRAIGHT DIMENSIONS TO CENTER UNLESS OTHERWISE SPECIFIED	SEE 07/22/05 SCALE NONE
Dwg. No. 647.4100	REV. N/C SHEET 3 OF 5

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

.063



4.80

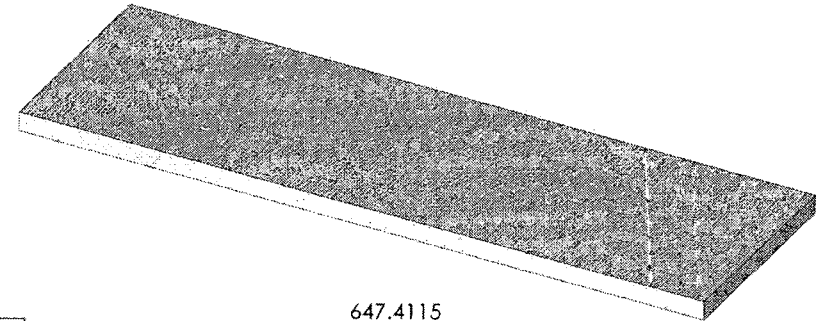
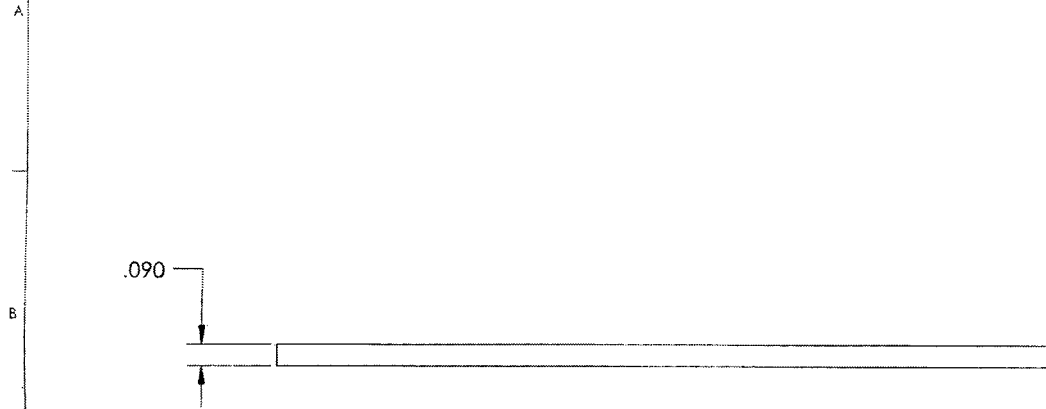
.984

647.4114

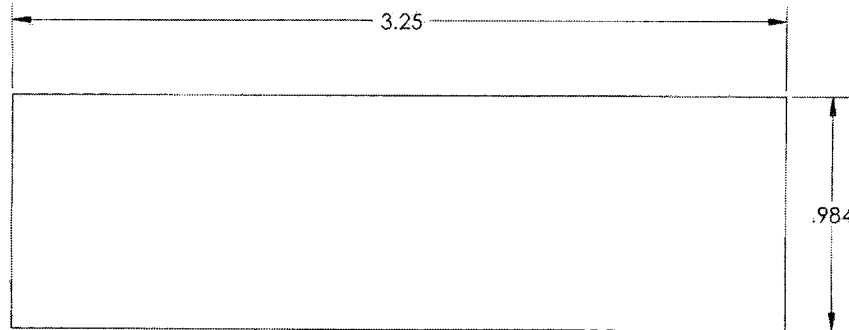
ORIGINAL DATE ISSUED BY DRAWN BY P. FORBES CHECKED D. BAPPIER DESIGNED P. BAPPIER CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES .5°		SHEETMETAL	
STD	CAGE CODE	DWG. NO.	REV.
B	07ME6	647.4100	N/C
SCALE NONE		SHEET 4 OF 6	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REV.	DESCRIPTION	DATE	APPROVED



647.4115



ORIGINAL DATE DESIGNED BY: DATE: 10/15/07 DRAWN BY: J. ROSSANO CHECKED BY: D. BARTER DRAWING APPROVAL P. B. PAVO REVISION CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
IF METS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.001 ANGLES ±.5°		SHEETMETAL	
201	SCALE CODE	DOC. NO.	REV.
B	07M26	647.4100	N/C
SCALE: NONE		SHEET: 5 OF 6	

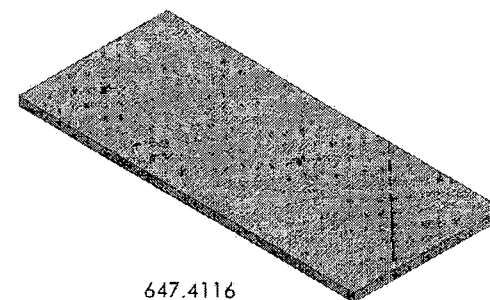
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF
APICAL INDUSTRIES AND REPRODUCTION IN PART OR WHOLE WITHOUT
THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

.050

2.00

.875



647.4116

OPTIONAL DATE		APICAL INDUSTRIES	
DESIGNED BY	DESIGNED	2608 TEMPLE HEIGHTS DR.	
DRAWN BY	CHECKED	OCEANSIDE, CA. 92056-3512 (760)724-5300	
BY POLEMAN	BY DESIGNER	SHEETMETAL	
DRAWING APPROVAL		SHEET 647.4100	
BY BEAVIS		SCALE NONE	
DESIGNED		SHEET 6 OF 6	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED		SEE CASE CODE	ENCL. NO.
DIMENSIONS ARE IN INCHES		8 074626	647.4100
TOLERANCES ARE:			N/C
FRACTIONS DECIMALS ±.01			
DECIMALS DECIMALS ±.005			
ANGLES ±.5°			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO24495**

Purchase Order Date 6/6/2014

PO Print Date 6/10/2014

Page Number 1 of 2

Order From :

VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 613-446-4544

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extend Pri
1	114794	647.1611 WIPER	6/10/2014 Yes 6/10/2014		6.00 ✓	\$10.70	\$64.
FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N							
Line Total:							\$64.
2	120052	647.4115 SHIM	6/10/2014 Yes 6/10/2014		6.00	\$6.25	\$37.
FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N							
Line Total:							\$37.
3	120051	647.4114 SHIM	6/10/2014 Yes 6/10/2014		6.00	\$6.40	\$38.
FINISH: HARD BLACK ANODIZE AS PER IAW MIL-A-8625 TYPE III, CLASS 2 / PRIME AS PER IAW MIL-P-23377J TYPE 1 CLASS N							

Note:

6/10/2014



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 63089

Date: 10-Jun-14

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
1 lot	Part: ASST 6 PCS 647.1611 (10.70) 6 PCS 647.4115 (6.25) 6 PCS 647.4114 (6.40) 4 PCS 647.4212 (6.25) HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N PRICE IS PER PIECE Job: 20140353	Rev: 8014-6-10 PO: 24495 Line:	
<p align="center">Certificate of Conformance</p> <p>A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.</p> <p align="center">ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY</p> <p>DATE: 10/6/14</p> <p>CERTIFIED SIGNATURE: _____</p> <p>RECEIVER SIGNATURE: _____</p>			